FILE 'STNGUIDE' ENTERED AT 07:13:35 ON 15 MAY 2006

FILE 'REGISTRY' ENTERED AT 07:23:52 ON 15 MAY 2006

L10 STRUCTURE UPLOADED

L11 7 S L10 SAM SUB=L7

FILE 'STNGUIDE' ENTERED AT 07:29:17 ON 15 MAY 2006

FILE 'REGISTRY' ENTERED AT 07:33:38 ON 15 MAY 2006

L12 STRUCTURE UPLOADED

L13 1 S L12 SAM SUB=L7

L14 3 S L12 SSS FULL SUB=L7

FILE 'CA' ENTERED AT 07:35:35 ON 15 MAY 2006

=> s 114

L15 2 L14

=> d 115 bib

L15 ANSWER 1 OF 2 CA COPYRIGHT 2006 ACS on STN

Full Text

AN 143:376395 CA

- TI Hydrazone-based charge-transport materials for organic electrophotographic photoreceptors
- IN Jubran, Nusrallah; Tokarski, Zbigniew; Getautis, Vytautas; Daskeviciene, Maryte; Malinauskas, Tadas; Sidaravicius, Jonas; Jankauskas, Vygintas
- SO U.S. Pat. Appl. Publ., 17 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

PΑ

	L'ETA'	TA T	-																	
		PAT	rent	NO.			KIN	D	DATE		2	APPL	ICAT:	DATE						
						_									_					
	PI	US 2005221213			A1		20051006		1	US 2	004-	20040331								
	CN 1677251			Α		2005	1005	CN 2005-10052117							20050225					
		EP 1584985					A2		2005	1012]	EP 2	005-	2511	30		20050225			
		ΕP	EP 1584985			A3		2005	1109											
			R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
				IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,	
				BA,	HR,	IS,	YU													
		JР	JP 2005292836						20051020			JP 2	005-	20050331						
PRAI US 2004-815243					A		20040331													

=> s 115 bib 2

MISSING OPERATOR L15 BIB

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> d 115 bib 2

L15 ANSWER 2 OF 2 CA COPYRIGHT 2006 ACS on STN

Full Text

AN 143:115341 CA

- TI Preparation of organophotoreceptors with charge transport materials having three linked hydrazone groups
- IN Tokarski, Zbigniew; Paulauskaite, Ingrida; Sidaravicius, Jonas; Jubran, Nusrallah; Jankauskas, Vygintas; Getautis, Vytautas
- PA Samsung Electronics Co., Ltd., S. Korea
- SO Eur. Pat. Appl., 25 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	C14 1	-																	
	PATENT NO.						D	DATE		APPLICATION NO.							DATE		
							-												
PI	EP 1550653					A1 20050706				EP 2004-257415							20041130		
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, II	Γ,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TE	₹,	BG,	CZ,	EE,	HU,	PL,	SK,
			HR,	IS,	YU														
	US 2005147903				A1 20050707			US 2003-749418							20031231				
CN 1637626				Α	A 20050713				CN 2004-10098242							20041130			
	JP 2005196201					A2		2005	0721		JP	2009	5-2	84			2	0050	104
PRAI	US	2003	-749	418		Α		2003	1231										
os	MA	RPAT	143:	1153	41														

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d hitstr

L15 ANSWER 1 OF 2 CA COPYRIGHT 2006 ACS on STN IT 866409-35-0P 866409-36-1P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(hydrazone-based charge-transport materials for org. electrophotog. photoreceptors for high quality images)

RN 866409-35-0 CA

CN 9H-Carbazole-3,6-dicarboxaldehyde, 9-ethyl-, bis[[3-[5-(diethylamino)-2-[(methylphenylhydrazono)methyl]phenoxy]-2-hydroxypropyl]phenylhydrazone]
(9CI) (CA INDEX NAME)

PAGE 1-B

RN 866409-36-1 CA

CN Benzaldehyde, 4,4'-(phenylimino)bis-, bis[[3-[5-(diethylamino)-2-[(diphenylhydrazono)methyl]phenoxy]-2-hydroxypropyl]phenylhydrazone] (9CI)

(CA INDEX NAME)

PAGE 1-8

PAGE 1-B

=> d hitstr 2

L15 ANSWER 2 OF 2 CA COPYRIGHT 2006 ACS on STN IT 857520-87-7P

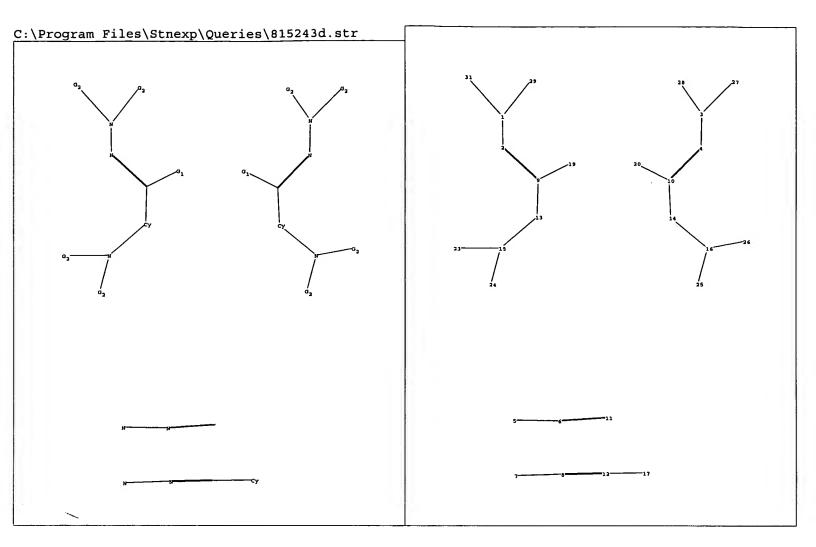
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(prepn. of organophotoreceptors with charge transport materials having three linked hydrazone groups)

RN 857520-87-7 CA

CN Acetic acid, [[3-[[4-(diphenylamino)phenyl]methylene]phenylhydrazino]-2-hydroxypropyl]thio]-, 2,2-bis[[[[3-[[[4-(diphenylamino)phenyl]methylene]phenylhydrazino]-2-hydroxypropyl]thio]acetyl]oxy]methyl]-1,3-propanediylester (9CI) (CA INDEX NAME)

PAGE 2-B



chain nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 19 20 23 24 25 26 27 28 29 31

chain bonds :

1-2 1-29 1-31 2-9 3-4 3-27 3-28 4-10 5-6 6-11 7-8 8-12 9-13 9-19 10-14 10-20 12-17 13-15 14-16 15-23 15-24 16-25 16-26

exact/norm bonds :

1-2 1-29 1-31 2-9 3-4 3-27 3-28 4-10 5-6 6-11 7-8 8-12 9-13 9-19 10-14 10-20 12-17 13-15 14-16 15-23 15-24 16-25 16-26

G1:H,Cy,Ak

G2:Cy,Ak

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS

11:CLASS 12:CLASS 13:Atom 14:Atom 15:CLASS 16:CLASS 17:Atom 19:CLASS 20:CLASS

23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 31:CLASS

Welcome to STN International NEWS 1 Web Page URLs for STN Seminar Schedule - N. America NEWS 2 "Ask CAS" for self-help around the clock NEWS 3 JAN 17 Pre-1988 INPI data added to MARPAT NEWS 4 FEB 21 STN AnaVist, Version 1.1, lets you share your STN AnaVist visualization results NEWS 5 FEB 22 The IPC thesaurus added to additional patent databases on STN NEWS 6 FEB 22 Updates in EPFULL; IPC 8 enhancements added NEWS 7 FEB 27 New STN AnaVist pricing effective March 1, 2006 NEWS 8 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes NEWS 9 MAR 08 X.25 communication option no longer available after June 2006 NEWS 10 MAR 22 EMBASE is now updated on a daily basis NEWS 11 APR 03 New IPC 8 fields and IPC thesaurus added to PATDPAFULL NEWS 12 APR 03 Bibliographic data updates resume; new IPC 8 fields and IPC thesaurus added in PCTFULL NEWS 13 APR 04 STN AnaVist \$500 visualization usage credit offered NEWS 14 APR 12 LINSPEC, learning database for INSPEC, reloaded and enhanced NEWS 15 APR 12 Improved structure highlighting in FQHIT and QHIT display in MARPAT NEWS 16 APR 12 Derwent World Patents Index to be reloaded and enhanced during second quarter; strategies may be affected NEWS 17 MAY 10 CA/CAplus enhanced with 1900-1906 U.S. patent records NEWS 18 MAY 11 KOREAPAT updates resume NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0jc(jp), AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005. V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT http://download.cas.org/express/v8.0-Discover/ NEWS HOURS STN Operating Hours Plus Help Desk Availability NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

For general information regarding STN implementation of IPC 8

COMPLETE THE STN SURVEY - APRIL 27 THROUGH MAY 31

Dear valued STN customer,

NEWS IPC8

In an effort to enhance your experience with STN, we would like to better understand what you find useful. Please take approximately 5 minutes to complete a web survey.

If you provide us with your name, login ID, and e-mail address, you will be entered in a drawing to win a free iPod(R). Your responses will be kept confidential and will help us make future improvements to STN.

Take survey: http://www.zoomerang.com/survey.zgi?p=WEB2259HNKWTUW

Thank you in advance for your participation.

FILE 'HOME' ENTERED AT 06:52:48 ON 15 MAY 2006

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 06:53:03 ON 15 MAY 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 14 MAY 2006 HIGHEST RN 884198-07-6 DICTIONARY FILE UPDATES: 14 MAY 2006 HIGHEST RN 884198-07-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/GNLINE/UG/recprops.html

=>

Uploading structure

L1 STRUCTURE UPLOADED

=> s sam 11

SAMPLE SEARCH INITIATED 06:54:08 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 966 TO ITERATE

100.0% PROCESSED 966 ITERATIONS SEARCH TIME: 00.00.01

11 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

17456 TO 21184

PROJECTED ANSWERS:

22 TO 418

1.2

11 SEA SSS SAM L1

=> d scan

L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN Mercury (2+), tetrakis[2-[(4-nitrophenyl)methylene]hydrazinecarbothioamide-

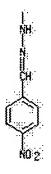
S]-, dichloride, (T-4)-(9CI)

MF C32 H32 Hg N16 O8 S4 . 2 Cl

CI CCS

PAGE 1-A

esor no



12 11-

- L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
- MF C47 H73 N31 O3
- CI COM

PAGE 1-B

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN Heptanediamide, N,N'-bis[3,5-bis[1-[(aminoiminomethyl)hydrazono]ethyl]phen yl]-, tetrahydrochloride (9CI)

MF C31 H46 N18 O2 . 4 Cl H

4 HC)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN 2-Naphthalenecarboxylic acid, 4,4'-[[5,10-bis[[3-[(2,2-diphenylhydrazino)carbonyl]-2-hydroxy-1-naphthalenyl]azo]-2-oxo-2H-cyclopenta[]phenanthrene-1,3-diyl]bis(4,1-phenyleneazo)]bis[3-hydroxy-,bis(2,2-diphenylhydrazide) (9CI)

MF C121 H82 N16 O9

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

MF C101 H66 N16 O9

PAGE 1-B

-Fh:

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

MF C28 H28 Cd N12 O12 . 2 N O3

CM 1

PAGE 1-A

PAGE 2-A

02N

CM 2

- L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
- IN 9H-Carbazole-3,6-dicarboxaldehyde, 9-ethyl-, bis[[3-[5-(diethylamino)-2[(methylphenylhydrazono)methyl]phenoxy]-2-hydroxypropyl]phenylhydrazone]
 (9CI)
- MF C70 H79 N11 O4

PASE 1-R

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN Hydrazinecarboximidamide, 2,2',2'',2'''-[carbonylbis(imino-5,1,3-

benzenetriyldiethylidyne)]tetrakis-, heptahydrochloride (9CI)

MF C25 H36 N18 O . 7 Cl H

7 HC1

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN 11H-Benzo[a] carbazole-3-carboxaldehyde, 1,1',1'',1'''-[[1,1'-biphenyl]4,4'-diylbis[nitrilobis(4,1-phenyleneazo)]]tetrakis[2-hydroxy-,

tetrakis[[(2-ethylphenyl)methylene]hydrazone] (9CI)

MF C140 H104 N22 O4

PASE 1-B

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
- MF C104 H76 N16 O12 S

PAGE 1-A

PAGE 2-A

PAGE 2-B

∼ CHe

^{**}PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

- L2 11 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
- IN 2-Naphthalenecarboxylic acid, 4,4',4'',4'''-[(5,5'-dibromo[1,1'-binaphthalene]-4,4'-diyl)bis[nitrilobis(4,1-phenyleneazo)]]tetrakis[2-hydroxy-, tetrakis(2,2-diphenylhydrazide) (9CI)
- MF C136 H94 Br2 N18 O8

PAGE 3-A

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> log h

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY SESSION 3.08 3.29

FULL ESTIMATED COST

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 06:57:17 ON 15 MAY 2006

* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * * * SESSION RESUMED IN FILE 'REGISTRY' AT 06:58:14 ON 15 MAY 2006 FILE 'REGISTRY' ENTERED AT 06:58:14 ON 15 MAY 2006 COPYRIGHT (C) 2006 American Chemical Society (ACS)

COST IN U.S. DOLLARS SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST 3.08 3.29

=> log h

COST IN U.S. DOLLARS SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST 4.84 5.05

SESSION WILL BE HELD FOR 60 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 07:00:22 ON 15 MAY 2006

* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * * SESSION RESUMED IN FILE 'REGISTRY' AT 07:04:20 ON 15 MAY 2006 FILE 'REGISTRY' ENTERED AT 07:04:20 ON 15 MAY 2006 COPYRIGHT (C) 2006 American Chemical Society (ACS)

COST IN U.S. DOLLARS SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST 4.84 5.05

=> Uploading structure

screen 1918

L3 SCREEN CREATED

=>

L4 STRUCTURE UPLOADED

=>

L5 QUE L4 NOT L3

=> s sam 15

SAMPLE SEARCH INITIATED 07:05:51 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 672 TO ITERATE

100.0% PROCESSED 672 ITERATIONS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

11885 TO 14995

PROJECTED ANSWERS:

9 TO 360

9 SEA SSS SAM L4 NOT L3

=> d scan

L6 9 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN 2-Naphthalenecarboxylic acid, 4,4'-[[5,10-bis[[2-hydroxy-3-

[[(phenylmethylene)hydrazino]carbonyl]-1-naphthalenyl]azo]-2-oxo-2H-

cyclopenta[1]phenanthrene-1,3-diyl]bis(4,1-phenyleneazo)]bis[3-hydroxy-,
bis[(phenylmethylene)hydrazide] (9CI)

MF C101 H66 N16 O9

PAGE 1-A

9 ANSWERS

PAGE 1-B

-Fh:

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L6 9 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN 9H-Carbazole-3,6-dicarboxaldehyde, 9-ethyl-, bis[[3-[5-(diethylamino)-2[(methylphenylhydrazono)methyl]phenoxy]-2-hydroxypropyl]phenylhydrazone]
(9CI)

MF C70 H79 N11 O4

PAGE 1-8

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L6 9 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN Hydrazinecarboximidamide, 2,2',2'',2'''-[carbonylbis(imino-5,1,3-benzenetriyldiethylidyne)]tetrakis-, heptahydrochloride (9CI)

MF C25 H36 N18 O . 7 Cl H

7 HCT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L6 9 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN 11H-Benzo[a]carbazole-3-carboxaldehyde, 1,1',1'',1'''-[[1,1'-biphenyl]4,4'-diylbis[nitrilobis(4,1-phenyleneazo)]]tetrakis[2-hydroxy-,

tetrakis[[(2-ethylphenyl)methylene]hydrazone] (9CI)

MF C140 H104 N22 O4

PRICE 1-3

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L6 9 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
- IN 2-Naphthalenecarboxylic acid, 4,4',4'',4'''-[2,3,4,5thiophenetetrayltetrakis(4,1-phenyleneazo)]tetrakis[3-hydroxy-,
 tetrakis[[(4-methoxyphenyl)methylene]hydrazide] (9CI)
- MF C104 H76 N16 O12 S

PAGE 1-A

PAGE 2-A

PRGE 2-B

ે CHe

^{**}PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

- L6 9 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
- IN 2-Naphthalenecarboxylic acid, 4,4',4'',4'''~[(5,5'-dibromo[1,1'-binaphthalene]-4,4'-diyl)bis[nitrilobis(4,1-phenyleneazo)]]tetrakis[2-hydroxy-, tetrakis(2,2-diphenylhydrazide) (9CI)
- MF C136 H94 Br2 N18 O8

PAGE 1-A

PAGE 2-A

PAGE 3-A

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L6 9 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
- IN Hydrazinecarboximidamide, 2,2',2'',2'''-[[[2-[[[[3,5-bis[1[(aminoiminomethyl)hydrazono]ethyl]phenyl]amino]carbonyl]amino]ethyl]imino
]bis(3,1-propanediyliminocarbonylimino-5,1,3-benzenetriyldiethylidyne)]tet
 rakis- (9CI)
- MF C47 H73 N31 O3
- CI COM

PAGE 1-8

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L6 9 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

 $IN \qquad \text{Heptanediamide, N,N'-bis[3,5-bis[1-[(aminoiminomethyl)) hydrazono] ethyl] phen} \\$

yl]-, tetrahydrochloride (9CI)

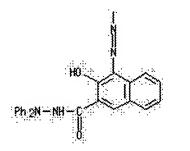
MF C31 H46 N18 O2 . 4 Cl H

4 HC1

- L6 9 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
- IN 2-Naphthalenecarboxylic acid, 4,4'-[[5,10-bis[[3-[(2,2-diphenylhydrazino)carbonyl]-2-hydroxy-1-naphthalenyl]azo]-2-oxo-2H-cyclopenta[]phenanthrene-1,3-diyl]bis(4,1-phenyleneazo)]bis[3-hydroxy-,bis(2,2-diphenylhydrazide) (9CI)
- MF C121 H82 N16 O9

PAGE 1-A

PAGE 2-A



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> d his

(FILE 'HOME' ENTERED AT 06:52:48 ON 15 MAY 2006)

FILE 'REGISTRY' ENTERED AT 06:53:03 ON 15 MAY 2006 STRUCTURE UPLOADED

L1 STRUCTURE L2 11 S SAM L1

L3 SCREEN 1918 L4 STRUCTURE UPLOADED

L5 QUE L4 NOT L3 L6 9 S SAM L5

,=> s 15 sss full

FULL SEARCH INITIATED 07:09:50 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 13633 TO ITERATE

100.0% PROCESSED 13633 ITERATIONS 169 ANSWERS SEARCH TIME: 00.00.01

L7 169 SEA SSS FUL L4 NOT L3

=> d scan

L7 169 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN 2-Naphthalenecarboxamide, 4,4',4'',4'''-[1,4-phenylenebis[nitrilobis(4,1-phenyleneazo)]]tetrakis[3-hydroxy-N-[4-[(methylphenylhydrazono)methyl]phen yl]- (9CI)

MF C130 H100 N22 O8

PAGE 1-B

PAGE 2-8

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L7 169 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
- IN 2-Naphthalenecarboxylic acid, 4,4',4'',4'''-[1,3phenylenebis[nitrilobis(methylene-4,1-phenyleneazo)]]tetrakis[3-hydroxy-,
 tetrakis[[(4-chlorophenyl)methylene]hydrazide] (9CI)
- MF C106 H76 Cl4 N18 O8

PAGE 1-A

PAGE 1-B

PAGE 2-A

PAGE 2-B

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 169 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

MF C92 H60 N16 O22 S

PAGE 1-8

PAGE 2-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

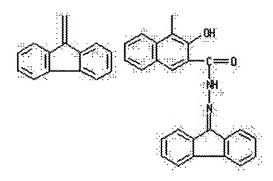
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L7 169 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

MF C131 H81 N19 O8

PAGE 1-A

PAGE 3-A



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L7 169 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
- MF C36 H56 N18 O2 . 4 C1 H

4 HC1

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L7 169 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN 11H-Benzo[a]carbazole-3-carboxylic acid, 1,1'-[[4-[2-[4-[6-[bis[4-[2-hydroxy-3-[[1-[2-(trifluoromethyl)phenyl]ethylidene]hydrazino]carbonyl]11H-benzo[a]carbazol-1-yl]azo]phenyl]imino]-1-methyl-1H-benzimidazol-2yl]phenyl]ethenyl]phenyl]imino]bis(4,1-phenyleneazo)]bis[2-hydroxy-,
bis[[1-[2-(trifluoromethyl)phenyl]ethylidene]hydrazide] (9CI)

MF C150 H100 F12 N24 O8

PAGE 1-B

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L7 169 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN Pentanediamide, N,N'-bis[3,5-bis[1-[(aminoiminomethyl)hydrazono]ethyl]phen
yl]- (9CI)

MF C29 H42 N18 O2

CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1) end

=> d his

(FILE 'HOME' ENTERED AT 06:52:48 ON 15 MAY 2006)

FILE 'REGISTRY' ENTERED AT 06:53:03 ON 15 MAY 2006

L1 STRUCTURE UPLOADED

L2 11 S SAM L1 L3 SCREEN 1918

T.4 STRUCTURE UPLOADED L5 QUE L4 NOT L3 L6 9 S SAM L5 L7 169 S L5 SSS FULL => fil ca; s 17 COST IN U.S. DOLLARS SINCE FILE TOTAL SESSION ENTRY FULL ESTIMATED COST 177.06 177.27 FILE 'CA' ENTERED AT 07:11:50 ON 15 MAY 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS) Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited. FILE COVERS 1907 - 11 May 2006 VOL 144 ISS 21 FILE LAST UPDATED: 11 May 2006 (20060511/ED) New CAS Information Use Policies, enter HELP USAGETERMS for details. This file contains CAS Registry Numbers for easy and accurate substance identification. L8 109 L7 => s 18 and ((charge (2a) (transport? or transfer?)) or electrophoto? or photoconduct? or photo: 468636 CHARGE 746226 TRANSPORT? 908522 TRANSFER? 96958 CHARGE (2A) (TRANSPORT? OR TRANSFER?) 68630 ELECTROPHOTO? 67719 PHOTOCONDUCT? 35612 PHOTORECEPT? L9 31 L8 AND ((CHARGE (2A) (TRANSPORT? OR TRANSFER?)) OR ELECTROPHOTO? OR PHOTOCONDUCT? OR PHOTORECEPT?) => d scan 31 ANSWERS L9 CA COPYRIGHT 2006 ACS on STN IC ICM G03G005-06 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Electrophotographic charge-generating tetrakisazo pigments electrophotog tetrakisazo charge generating pigment Electrophotographic photoconductors (composite, contg. charge-generating tetrakisazo pigments, for improved sensitivity and voltage stability) TΤ Azo compounds

RL: USES (Uses)

```
(tetrakis-, electrophotog. charge-generating agents)
ΙT
     92-77-3
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (coupling reaction of, with tetrazonium salts, electrophotog.
        charge-generating tetrakisazo pigments from)
TT
     98094-34-9 98113-92-9 110573-29-0 110573-30-3 110573-31-4
     110573-32-5 110573-33-6 110573-34-7 110573-35-8
                                                          110573-36-9
     110573-37-0 110573-38-1 110573-39-2 110573-40-5
     110573-41-6 110573-42-7 110573-43-8
    110573-44-9 110573-45-0 110573-46-1 110573-47-2
    110573-48-3 110573-49-4 110573-50-7 110573-51-8
                                                           110573-52-9
    110573-53-0 110573-54-1 110573-55-2 110573-56-3
                                                           110573-57-4
    110573-58-5 110573-59-6 110573-60-9 110573-61-0
    110573-62-1 110573-63-2 110573-64-3 110573-65-4
    110573-66-5 110573-67-6 110573-68-7 110573-69-8
                                                           110573-70-1
    110573-71-2 110573-72-3
                                            110573-74-5
                                110573-73-4
                                                           110573-75-6
    110591-92-9 110591-93-0 110591-94-1
                                             110591-95-2
                                                           110591-96-3
     110591-97-4 110591-98-5 110591-99-6 110592-00-2
     110592-01-3
     RL: USES (Uses)
        (electrophotog. charge-generating pigments)
IT
    98094-32-7P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. and use of, as electrophotog. charge-generating
        pigments)
IT
     98094-46-3
     RL: USES (Uses)
        (reaction of tetrazotized, electrophotog. charge-generating
        tetrakisazo pigments from)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1) end
=> fil stnquide
COST IN U.S. DOLLARS
                                                SINCE FILE
                                                               TOTAL
                                                    ENTRY
                                                             SESSION
FULL ESTIMATED COST
                                                     12.48
                                                              189.75
FILE 'STNGUIDE' ENTERED AT 07:13:35 ON 15 MAY 2006
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE
FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: May 12, 2006 (20060512/UP).
=> FILE REG
COST IN U.S. DOLLARS
                                                SINCE FILE
                                                               TOTAL
                                                     ENTRY
                                                             SESSION
FULL ESTIMATED COST
                                                      1.02
                                                              190.77
FILE 'REGISTRY' ENTERED AT 07:23:52 ON 15 MAY 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 American Chemical Society (ACS)
Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.
STRUCTURE FILE UPDATES:
                         14 MAY 2006 HIGHEST RN 884198-07-6
```

DICTIONARY FILE UPDATES: 14 MAY 2006 . HIGHEST RN 884198-07-6

New CAS Information Use Policies, enter HELP USAGETERMS for details. TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006 Please note that search-term pricing does apply when conducting SmartSELECT searches. ***************** * The CA roles and document type information have been removed from * * the IDE default display format and the ED field has been added, * effective March 20, 2005. A new display format, IDERL, is now * available and contains the CA role and document type information. * *********** Structure search iteration limits have been increased. See HELP SLIMITS for details. REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to: http://www.cas.org/ONLINE/UG/regprops.html Uploading structure L10 STRUCTURE UPLOADED => s 110 sub=17 sam SAMPLE SUBSET SEARCH INITIATED 07:26:29 FILE 'REGISTRY' SAMPLE SUBSET SCREEN SEARCH COMPLETED -9 TO ITERATE 100.0% PROCESSED 9 ITERATIONS 7 ANSWERS SEARCH TIME: 00.00.01 PROJECTIONS (WITHIN SPECIFIED SUBSET): ONLINE **COMPLETE** PROJECTED ITERATIONS (WITHIN SPECIFIED SUBSET): 9 TO 360 7 TO PROJECTED ANSWERS (WITHIN SPECIFIED SUBSET): 298 L11 7 SEA SUB=L7 SSS SAM L10 => d scan

11H-Benzo[a]carbazole-3-carboxaldehyde, 1,1',1'',1'''-[[1,1'-biphenyl]-

4,4'-diylbis[nitrilobis(4,1-phenyleneazo)]]tetrakis[2-hydroxy-,

L11 7 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

MF

C140 H104 N22 O4

tetrakis[[(2-ethylphenyl)methylene]hydrazone] (9CI)

PAGE 1-B

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L11 7 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
- MF C101 H66 N16 O9

PAGE 1-A

$$P_{N} - CH = N - NH - CH = N - NH - NH - CH = CH - NH - NH - CH - NH - CH$$

PAGE 1-8

-- Ph

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L11 7 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

rakis- (9CI) MF C47 H73 N31 O3 CI COM

PAGE 1-B

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L11 7 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN IN 2-Naphthalenecarboxylic acid, 4,4',4'',4'''-[2,3,4,5-

thiophenetetrayltetrakis(4,1-phenyleneazo)]tetrakis[3-hydroxy-, tetrakis[[(4-methoxyphenyl)methylene]hydrazide] (9CI)
MF C104 H76 N16 O12 S

PAGE 2-8

~ CMe

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L11 7 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN 9H-Carbazole-3,6-dicarboxaldehyde, 9-ethyl-, bis[[3-[5-(diethylamino)-2[(methylphenylhydrazono)methyl]phenoxy]-2-hydroxypropyl]phenylhydrazone]
(9CI)

MF C70 H79 N11 O4

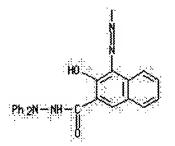
PAGE 1-B

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L11 7 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
- IN 2-Naphthalenecarboxylic acid, 4,4'-[[5,10-bis[[3-[(2,2-diphenylhydrazino)carbonyl]-2-hydroxy-1-naphthalenyl]azo]-2-oxo-2H-cyclopenta[]phenanthrene-1,3-diyl]bis(4,1-phenyleneazo)]bis[3-hydroxy-,bis(2,2-diphenylhydrazide) (9CI)
- MF C121 H82 N16 O9

PAGE 1-A

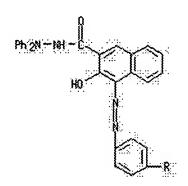
PAGE 2-A



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L11 7 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
- IN 2-Naphthalenecarboxylic acid, 4,4',4'',4'''-[(5,5'-dibromo[1,1'-binaphthalene]-4,4'-diyl)bis[nitrilobis(4,1-phenyleneazo)]]tetrakis[2-hydroxy-, tetrakis(2,2-diphenylhydrazide) (9CI)
- MF C136 H94 Br2 N18 O8

PAGE 3-A



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> .

. IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> fil stnguide

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 3.96 194.73

FULL ESTIMATED COST

FILE 'STNGUIDE' ENTERED AT 07:29:17 ON 15 MAY 2006
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: May 12, 2006 (20060512/UP).

=> FILE REG

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST

0.42 195.15

FILE 'REGISTRY' ENTERED AT 07:33:38 ON 15 MAY 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 14 MAY 2006 HIGHEST RN 884198-07-6 DICTIONARY FILE UPDATES: 14 MAY 2006 HIGHEST RN 884198-07-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> Upleading structure

L12 STRUCTURE UPLOADED

=> s 112 sub=17 sam

SAMPLE SUBSET SEARCH INITIATED 07:34:12 FILE 'REGISTRY'

SAMPLE SUBSET SCREEN SEARCH COMPLETED - 9 TO ITERATE

100.0% PROCESSED 9 ITERATIONS 1 ANSWERS SEARCH TIME: 00.00.01

PROJECTIONS (WITHIN SPECIFIED SUBSET): ONLINE **COMPLETE**

PROJECTED ITERATIONS (WITHIN SPECIFIED SUBSET): 9 TO 360

PROJECTED ANSWERS (WITHIN SPECIFIED SUBSET): 1 TO 80

L13 1 SEA SUB=L7 SSS SAM L12

=> d scan

L13 1 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN 9H-Carbazole-3,6-dicarboxaldehyde, 9-ethyl-, bis[[3-[5-(diethylamino)-2-[(methylphenylhydrazono)methyl]phenoxy]-2-hydroxypropyl]phenylhydrazone]
(9CI)

MF C70 H79 N11 O4

PAGE 1-8

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> s 112 sub=17 sss full

FULL SUBSET SEARCH INITIATED 07:34:57 FILE 'REGISTRY'

FULL SUBSET SCREEN SEARCH COMPLETED - 169 TO ITERATE

100.0% PROCESSED 169 ITERATIONS

SEARCH TIME: 00.00.01

L14 3 SEA SUB=L7 SSS FUL L12

=> d scan

L14 3 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN Acetic acid, [[3-[[[4-(diphenylamino)phenyl]methylene]phenylhydrazino]-2hydroxypropyl]thio]-, 2,2-bis[[[[[3-[[[4-(diphenylamino)phenyl]methylene]p
henylhydrazino]-2-hydroxypropyl]thio]acetyl]oxy]methyl]-1,3-propanediyl
ester (9CI)

MF C125 H120 N12 O12 S4

3 ANSWERS

PAGE 2-B

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L14 3 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN 9H-Carbazole-3,6-dicarboxaldehyde, 9-ethyl-, bis[[3-[5-(diethylamino)-2-

[(methylphenylhydrazono)methyl]phenoxy]-2-hydroxypropyl]phenylhydrazone]
(9CI)
MF C70 H79 N11 O4

PAGE 1-B

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1).

L14 3 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN Benzaldehyde, 4,4'-(phenylimino)bis-, bis[[3-[5-(diethylamino)-2[(diphenylhydrazono)methyl]phenoxy]-2-hydroxypropyl]phenylhydrazone] (9CI)

MF C84 H85 N11 O4

PAGE 1-B

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> fil ca

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY 40.72 SESSION 235.87

FILE 'CA' ENTERED AT 07:35:35 ON 15 MAY 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 11 May 2006 VOL 144 ISS 21 FILE LAST UPDATED: 11 May 2006 (20060511/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 06:52:48 ON 15 MAY 2006)

FILE 'REGISTRY' ENTERED AT 06:53:03 ON 15 MAY 2006

L1 STRUCTURE UPLOADED

L2 11 S SAM L1

L3 SCREEN 1918

L4 STRUCTURE UPLOADED

L5 QUE L4 NOT L3

L6 9 S SAM L5

L7 169 S L5 SSS FULL

FILE 'CA' ENTERED AT 07:11:50 ON 15 MAY 2006

L8 109 S L7

L9 31 S L8 AND ((CHARGE (2A) (TRANSPORT? OR TRANSFER?)) OR ELECTROPHO

This Page is inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

u	BLACK BORDERS
ο.	IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
	FADED TEXT OR DRAWING
.□	BLURED OR ILLEGIBLE TEXT OR DRAWING
	SKEWED/SLANTED IMAGES
	COLORED OR BLACK AND WHITE PHOTOGRAPHS
	GRAY SCALE DOCUMENTS
	LINES OR MARKS ON ORIGINAL DOCUMENT
	REPERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
	OTHER:

IMAGES ARE BEST AVAILABLE COPY.
As rescanning documents will not correct images problems checked, please do not report the problems to the IFW Image Problem Mailbox